

REMARKS / ARGUMENTS

I. General Remarks

Applicants respectfully request that the above amendments be entered and request reconsideration of the claims in light of the remarks contained herein.

Applicants respectfully submit that all of the amendments made herein add no new matter to the application and are supported by the specification as originally filed. All the amendments and remarks herein are made in a good faith effort to advance the prosecution on the merits of this case. It should not be assumed that the amendments herein were made for reasons relating to patentability. Applicants thank the Examiner for her careful consideration of this application, including the references Applicants have submitted.

II. Disposition of the Claims

At the time of the Office Action, claims 18-32 and 34-77 were pending. Claims 18, 19, 25, 26, 28, 29, 31, 32, 34-36, 42, 43, 45, 46, 48, 49, 65, 66 and 68-77 stand rejected and claims 20-24, 27, 30, 37-41, 44, 47, 50-64 and 67 stand withdrawn from consideration. In this response, Applicants have amended claims 26, 34, 43, and 74. Applicants reserve their rights to take up prosecution on the claims as originally filed in this or an appropriate continuation, continuation-in-part, or divisional application.

III. Remarks Regarding Claim Objections

The Examiner has objected to claims 43 and 74 because “‘d’limonene’ should be changed to ‘d-limonene.’” (Office Action at 2.) Applicants have amended claims 43 and 74 herein per the Examiner’s request. Applicants have similarly amended claim 26. Applicants therefore respectfully request the withdrawal of this objection.

IV. Remarks Regarding Rejections Under 35 U.S.C. § 112, Second Paragraph

The Examiner has rejected claim 34 under 35 U.S.C. 112, second paragraph, “as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.” (Office Action at 2.) Applicants have amended claim 34 to depend from claim 18 and therefore respectfully request withdrawal of this rejection.

V. Remarks Regarding Rejections Under 35 U.S.C. § 103(a)

A. Claims 35, 36, 42, 45, 46, 48, 49, 68-73, 75 and 76

Claims 35, 36, 42, 45, 46, 48, 49, 68-73, 75 and 76 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0048676 by

McDaniel *et al.* (hereinafter “*McDaniel*”) in view of U.S. Patent No. 5,585,524 issued to Sielcken *et al.* (hereinafter “*Sielcken*”). With respect to this rejection, the Office Action mailed on January 18, 2007 (hereinafter “Previous Office Action”) states:

McDaniel *et al.* disclose a method of treating a subterranean formation comprising providing a servicing fluid comprising low-density composite particulate proppant (See P62). It is the Examiner’s position that pumping the servicing fluid into a subterranean formation is implied. McDaniel *et al.* teach that a composite particulate comprises finely divided mineral or finely divided mineral and fiber, bound by suitable organic binder or inorganic binder (See P53). The composite particulates may comprise a low density filler material (such as ground walnut shells) together with a higher density filler material (such as finely divided silica), and a binder of polymer resin and cement, so long as the respective amounts of these ingredients results in a composite particle having the desired low density of 0.90 to 2.20 gm/cm³ (See P57). . .

(Previous Office Action at 3-4.) Additionally, the Office Action states:

McDaniel *et al.* are applied here for the same reasons as set forth in paragraph 3 of the Office Action mailed on 1/18/07.

As to amendment, McDaniel *et al.* teach low density composite particles made of a resin binder and filler particles selected from at least one member of the group consisting of minerals and low density fillers (See P59), for use as proppants in subterranean formations either to prop open subterranean formation fractures or for gravel packing (See Abstract). The proppants are carried into the well by suspending them in additional fluid to fill the fracture (claimed fracturing [sic] fluid) with a slurry of proppant in the fluid (See P5).

Resin coated proppants come in two types: precured and curable: precured resin coated proppants comprise a resin coating that is already cured before introducing into the well (See P13), and the curable proppant containing a resin coating of e.g. phenolic, is designed to crosslink under the stress and temperature conditions existing in the well formation (See P 14). The composite particles may be made by mixing a stream of the filler particles with a stream of a first portion of binder to form substantially homogeneous core particles of granulated product comprising the filler particles and the first binder stream, and to strengthen the composite particles, a stream of a second portion of binder may be coated onto the core particles of granulated product (See P59). The core binders are *preferably* precured (i.e. pre-curing is *optional*); the outer coating resins are curable or precured [*sic*]

(See P59). The composite particles are made in a mixer/granulator operated typically as a **batch** process (See P246-250).

McDaniel et al fail to teach that the composite particles are made by on-the-fly mixing; suspending them in additional fluid on-the-fly.

It is within the level of ordinary skill to operate a process continuously. In re Dilnot 138 USPQ 248 (CCPA 1963); In re Korpi 73 USPQ 229 (CCPA 1947); In re Lincoln 53 USPQ 40 (CCPA 1942). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have carried out a mixing process of McDaniel et al *continuously* with the expectation of providing the desired composite particles since it is within the level of ordinary skill in the art to operate a process continuously.

Sielcken et al teach that a process that can be carried out in a stirred reactor as batchwise process may be carried out as a *continuous* process using a stirred tank reactor or a tubular reactor (See column 5, lines 61-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have carried out a process of McDaniel et al continuously in a tubular reactor (**claimed on-the-fly mixing**) since Sielcken et al teach that a process that can be carried out in a stirred reactor as batchwise process may be carried out as a *continuous* process using a stirred tank reactor or a tubular reactor.

The cited prior art does not expressly teach that the mineral particles are added to a binder stream *before* the low density fillers such that the low density fillers are adhered to a binder coated mineral particles, as required by Amendment.

It is well settled that selection of any order of mixing ingredients or selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results is prima facie obvious In re Gibson, 39 F.2d 975, 5 USPQ 230 (CCPA 1930); In re Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have carried out a process of the cited prior art by adding mineral particles to a binder stream *before* the low density fillers, with the expectation of providing the desired composite particles, since it is well settled that selection of any order of mixing ingredients or selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results in prima facie obvious, and McDaniel et al do not limit their teaching to a particular order of mixing ingredients.

The Examiner takes official notice that pumping the servicing fluid into a subterranean formation is implied.

As to claims 42, 45-46, *McDaniel et al* teach that the binder may be a polyester resin (See P70), glycidyl ether [*sic*] (See P185) or epoxies such as bisphenol A-epichlorohydrin resin (See P187) or a natural resin (claimed tackifying composition) (See P75).

(Office Action at 2 (emphasis in original)). Applicants respectfully disagree and submit that the combination of *McDaniel* and *Sielcken* does not obviate independent claims 35 and 68 because the combination of references does not teach or suggest each and every element of the claims, and those elements which are not taught or suggested by the combination of references are not obviated in any manner by *McDaniel* and *Sielcken*. MPEP § 2142.

First, as discussed in Applicants' Request for Continued Examination filed September 13, 2007 (hereinafter the "RCE"), *McDaniel* fails to teach or suggest at least "providing at least one coated particulate comprising a coating material and a particulate material" and "adhering the density reducing material to a surface of the coated particulate on-the-fly to create at least one reduced-density, coated particulate," as recited in independent claims 35 and 68. Rather, the low density filler material taught in *McDaniel* is combined with a binder to form a low-density composite particulate. See *McDaniel* at [0053]. This composite particulate may then be coated with a resin. See *McDaniel* at [0059]. *McDaniel* fails to teach providing a coated particulate substrate and adhering a density-reducing material onto the surface of the coated particulate, or that a density-reducing material may be adhered on-the-fly. Nor does *Sielcken* teach or render obvious the missing elements.

The Office Action states that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to have carried out a mixing process of *McDaniel et al* continuously with the expectation of providing the desired composite particles since it is within the level of ordinary skill in the art to operate a process continuously." (Office Action at 5). The Office Action cites *In re Dilnot* case in support of this assertion. Respectfully, this case does not support the Examiner's conclusion in this case. The subject of *In re Dilnot* was a claim directed to a method of producing a cementitious structure wherein a stable air foam was introduced into a slurry of cementitious material. The court held the claimed continuous operation would have been obvious in light of the batch process of the prior art. First, unlike Applicants' invention, the claim at issue differed from the prior art *only* in requiring the addition of the foam to be continuous. Second, a continuous process is not necessarily an "on-the-fly"

process as claimed by Applicants and defined in Applicants' Specification. Third, even if Applicants' claims were to be construed as a continuous process as described in *In re Dilnot*, *McDaniel* still fails to obviate Applicants' claims. Even if the process of *McDaniel* were to be performed in a continuous manner, it would not produce the particles claimed by Applicants because nowhere does *McDaniel* teach "adhering [a] density reducing material to a surface of the coated particulate on-the-fly to create at least one reduced-density, coated particulate," as recited in independent claims 35 and 68.

Next, the Office Action states that *Sielcken* teaches "that a process that can be carried out in a stirred reactor as batchwise process may be carried out as a *continuous* process using a stirred tank reactor or a tubular reactor." (Office Action at 5; emphasis in original). The subject of *Sielcken* is a method for the preparation of an aldehyde. The cited portion of the reference describes suitable batchwise and continuous processes for the hydroformylation step of the aldehyde preparation method. Such processes do not obviate on-the-fly methods for adhering density-reducing materials onto a surface of a coated particulate for use in a subterranean formation, as there are substantial differences in structure and function of Applicants' invention and the invention of *Sielcken*. MPEP § 2141.01(a). Furthermore, the "tubular reactor" taught by *Sielcken* is not analogous to the on-the-fly method of Applicants' claims.

Finally, the Office Action states that *McDaniel* fails to teach "that the mineral particles are added to a binder stream *before* the low density fillers such that the low density fillers are adhered to a binder coated mineral particles." (Office Action at 5 (emphasis in original)). Despite this missing teaching, the Office Action states that:

[I]t would have been obvious to one of ordinary skill in the art at the time the invention was made to have carried out a process of the cited prior art by adding mineral particles to a binder stream *before* the low density fillers, with the expectation of providing the desired composite particles, since it is well settled that selection of any order of mixing ingredients or selection of any order of performing process steps is *prima facie* obvious in the absence of new or unexpected results in *prima facie* obvious, and *McDaniel* et al do not limit their teaching to a particular order of mixing ingredients.

Id. Applicants respectfully submit that *McDaniel* provides no suggestion of such a modification. As stated in the Office Action, *McDaniel* teaches that the composite particles may comprise low density fillers and/or minerals bound together with a binder material. No selection of the order

of the steps in *McDaniel* would result in the particles described in Applicants' claims, as *McDaniel* does not disclose "adhering [a] density reducing material to a surface of the coated particulate on-the-fly to create at least one reduced-density, coated particulate," regardless of any order in which the steps in *McDaniel* are performed. Rather, adding mineral particles to a binder stream before the low density fillers, as suggested by the Examiner, would result in composite particulates of low density fillers and minerals bound together by a binder. Such composite particulates are not equivalent to the particulates described in Applicants' claims.

Therefore, independent claims 35 and 68 are not obviated by *McDaniel* in view of *Sielcken*. Claims 36, 42, 45, 46, 48, 49, 69-73, 75 and 76 depend, either directly or indirectly, from independent claim 35 or 68 and therefore include all of the elements of the independent claim from which they each depend. See 35 U.S.C. § 112 ¶ 4 (2004). Accordingly, Applicants respectfully request the withdrawal of this rejection.

B. Claims 18, 19, 25, 28, 29, 31-32, 34, 65, and 66

Claims 18, 19, 25, 28, 29, 31-32, 34, 65, and 66 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *McDaniel* in view of *Sielcken*, further in view of U.S. Patent No. 4,969,523 issued to Martin *et al.* (hereinafter "*Martin*"). With respect to this rejection, the Office Action states:

McDaniel et al in view of Sielcken et al are applied here for the same reasons as above. McDaniel et al teach that the filler particles should be inert to components in the subterranean formation, e.g., well treatment fluids, and be able to withstand the conditions, e.g., temperature and pressure, in the well (See P81). However, McDaniel et al fail to teach that polystyrene divinylbenzene may be used as the density reducing material.

Martin et al teach that a combination of first and second particles having a density within the range of about 0.7 to about 4.0 (See column 3, lines 12-26), wherein the first particles has a density selected from the lower portion of the density range such as polystyrene divinylbenzene (SVDB) (See column 3, line 28) and the second particles has a density selected from the upper portion of the density range such as sand (See column 3, line 33) may be used in a servicing fluid for gravel packing of a subterranean formation (See column 2, lines 12-15). In other words, Martin et al teach that low density SVDB is suitable for the use in a servicing fluid, i.e. it is inert to components in the subterranean formation, e.g., well treatment fluids, and is able to withstand the conditions, e.g., temperature and pressure, in the well.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have used low density SVDB as the density reducing material in *McDaniel et al* since *Martin et al* teach that low density SVDB is suitable for the use in a servicing fluid, and *McDaniel et al* do not limit the density reducing material.

(Office Action at 3 (emphasis in original)). Applicants respectfully disagree and submit that the combination of *McDaniel*, *Sielcken*, and *Martin* does not obviate independent claim 18 because the combination of references does not teach or suggest each and every element of the claim, and those elements which are not taught or suggested by the combination of references are not obviated in any manner by *McDaniel*, *Sielcken*, and *Martin*. MPEP § 2142.

As discussed in the RCE and above in Section V(A) in reference to independent claims 35 and 68, *McDaniel* fails to teach or suggest at least “providing at least one coated particulate comprising a coating material and a particulate material” and “adhering the density reducing material to a surface of the coated particulate on-the-fly to create at least one reduced-density, coated particulate,” as recited in independent claim 18. Further, as discussed in Section V(A) above, *Sielcken* fails to teach the missing elements, nor does the combination of *McDaniel* and *Sielcken* render obvious the missing elements. *Martin* also fails to teach or render obvious the missing elements, as it does not teach or render obvious adhering polystyrene divinylbenzene (or any density reducing material) to the surface of a coated particulate, much less doing so on-the-fly. Rather, the Examiner has merely relied on *Martin* for its alleged teaching of the use of polystyrene divinylbenzene as a density reducing material.

Therefore, independent claim 18 is not obviated by *McDaniel* in view of *Sielcken* further in view of *Martin*. Claims 19, 25, 28, 29, 31-32, 34, 65, and 66 depend, either directly or indirectly, from independent claim 18 and therefore include all of the elements of the independent claim. See 35 U.S.C. § 112 ¶ 4 (2004). Accordingly, Applicants respectfully request the withdrawal of this rejection.

C. Claims 35, 36, 45, 49, 68-70, 72, and 75

Claims 35, 36, 45, 49, 68-70, 72, and 75 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,493,875 issued to Beck *et al.* (hereinafter “*Beck*”) in view of *Sielcken*. With respect to this rejection, the Office Action states:

Beck *et al* disclose a method of treating a subterranean formation comprising the steps of: providing a servicing fluid comprising reduced-density coated particulate proppant (See column 1, lines

11-15, 57-68). Such a coating may be applied to a great number of dense, high-strength core particulates by the steps of: (1) mixing the core particles with adhesive to provide adhesive-coated core particles, (2) while the adhesive is still tacky, mixing the coated core particles with hollow microparticles (preferably hollow ceramic microparticles) to adhere a plurality of the microparticles to each coated core, and (3) curing each adhesive composition to a nontacky state while keeping the individual coated core particles substantially out of adherent contact with each other (See column 2, line 61 to column 3, line 8[;] column 6, lines 34-45). The Examiner takes official notice that pumping the servicing fluid into a subterranean formation in implied.

Beck et al fail to teach that the composite particles are made by on-the-fly mixing.

Sielcken et al are applied here for the same reasons as above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have carried out a process of Beck et al by adding mineral materials to a binder stream *before* the low density fillers, with the expectation of providing the desired composite particles, since it is well settled that selection of any order of mixing ingredients or selection of any order of performing steps is prima facie obvious in the absence of new or unexpected results is prima facie obvious, and McDaniel et al do not limit their teaching to a particular order of mixing ingredients.

(Office Action at 4 (emphasis in original)). Applicants respectfully disagree and submit that the combination of *Beck* and *Sielcken* does not obviate independent claims 35 and 68 because the combination of references does not teach or suggest each and every element of the claims, and those elements which are not taught or suggested by the combination of references are not obviated in any manner by *Beck* and *Sielcken*. MPEP § 2142. Furthermore, Applicants respectfully submit that *Beck* teaches away from Applicants' claims. MPEP § 2141.02.

In particular, as argued in the RCE, *Beck* does not teach "adhering the density reducing material to a surface of the coated particulate on-the-fly to create at least one reduced-density, coated particulate," as recited in independent claims 35 and 68. Rather, as the Office Action states, *Beck* teaches coating a proppant by the steps of: (1) mixing the core particles with adhesive to provide adhesive-coated core particles, (2) while the adhesive is still tacky, mixing the coated core particles with hollow microparticles to adhere a plurality of the microparticles to each coated core, and (3) curing each adhesive composition to a nontacky state *while keeping the individual coated core particles substantially out of adherent contact with each other*. See

col. 2, line 61 - col. 3, line 8 (emphasis added). To keep the individual coated core particles substantially out of adherent contact with each other, *Beck* teaches that the core particles may be tumbled in an excess of hollow microparticles. *See* col. 3, lines 10-14. Such a requirement teaches away from an on-the-fly process. MPEP § 2141.02.

The argument that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have carried out a process of *Beck* by adding mineral materials to a binder stream before the low density fillers is nonsensical, as *Beck* does not teach mineral materials, binder streams, or low density fillers. The Examiner appears to have confused *Beck* with the alleged teachings of *McDaniel*. Regardless, as similarly discussed above in Section V(A) with respect to *McDaniel*, no selection of the order of the steps in *Beck* would result in the particles described in Applicants' claims, as *Beck* does not disclose "adhering [a] density reducing material to a surface of the coated particulate on-the-fly to create at least one reduced-density, coated particulate," regardless of any order in which the steps in *Beck* are performed.

Therefore, independent claims 35 and 68 are not obviated by *Beck* in view of *Sielcken*. Claims 36, 45, 49, 69, 70, 72, and 75 depend, either directly or indirectly, from independent claim 35 or 68 and therefore include all of the elements of the independent claim from which they each depend. *See* 35 U.S.C. § 112 ¶ 4 (2004). Accordingly, Applicants respectfully request the withdrawal of this rejection.

D. Claims 18, 19, 25, 28, 29, 31, 32, 65, 66, and 77

Claims 18, 19, 25, 28, 29, 31, 32, 65, 66, and 77 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *McDaniel* in view of *Sielcken*, further in view of *Martin*, further in view of U.S. Patent No. 5,908,073 issued to Nguyen *et al.* (hereinafter "*Nguyen*"). With respect to this rejection, the Office Action states:

The cited prior art is applied here for the same reasons as above. *McDaniel et al* do not expressly teach that a fracturing fluid is pumped into a subterranean formation. However, *Nguyen et al* teach pumping of a fracturing fluid into a subterranean zone (See Abstract).

As to claim 34, *McDaniel et al* fails to teach that the reduced-density, coated particulates are suspended in the servicing fluid on-the-fly.

Nguyen et al teach that a suspension of fibrous bundles and proppant in a fracturing fluid can be accomplished by utilizing

conventional batch mixing techniques to mix and suspend the bundles and proppant, or one or both of the bundles and proppant can be injected into the fracturing fluid on-the-fly (See column 5, lines 47-57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have suspended the reduced-density, coated particulates in a servicing fluid in *McDaniel et al* on-the-fly since *Nguyen et al* teach that a suspension of fibrous bundles and proppant in a fracturing fluid can be accomplished by utilizing conventional batch mixing techniques to mix and suspend the bundles and proppant, or one or both of the bundles and proppant can be injected into the fracturing fluid on-the-fly.

(Office Action at 5.; emphasis in original) Applicants respectfully disagree and submit that the combination of *McDaniel*, *Sielcken*, *Martin*, and *Nguyen* does not obviate independent claim 18 because the combination of references does not teach or suggest each and every element of the claim, and those elements which are not taught or suggested by the combination of references are not obviated in any manner by *McDaniel*, *Sielcken*, and *Martin*. MPEP § 2142.

At the outset, Applicants note that this rejection differs from the rejection over *McDaniel*, *Sielcken*, and *Martin* in two respects: the addition of *Nguyen* as a reference and the rejection of claim 77. Claim 77 depends from independent claim 35, whereas all of the other dependent claims in this rejection depend, either directly or indirectly, from independent claim 18. As the Examiner has provided no rationale as to why the elements of independent claim 35, much less the additional element of claim 77, is obviated by the addition of *Nguyen* to the combination of references, Applicants respectfully request withdrawal of this rejection with respect to claim 77 for at least this reason.

As discussed in the RCE and above in Section V(A) in reference to independent claims 35 and 68, *McDaniel* fails to teach or suggest at least “providing at least one coated particulate comprising a coating material and a particulate material” and “adhering the density reducing material to a surface of the coated particulate on-the-fly to create at least one reduced-density, coated particulate,” as recited in independent claim 18. Also, as discussed in Section V(A) above, *Sielcken* fails to teach the missing elements, nor does the combination of *McDaniel* and *Sielcken* render obvious the missing elements. Further, as discussed in Section V(B) above, *Martin* also fails to teach or render obvious the missing elements, as it does not teach or render obvious adhering polystyrene divinylbenzene (or any density reducing material) to the surface of a coated particulate, much less doing so on-the-fly. Nor does *Nguyen* teach or render obvious the

missing elements, as it does not teach or render obvious adhering polystyrene divinylbenzene (or any density reducing material) to the surface of a coated particulate, much less doing so on-the-fly. Rather, the Examiner has merely relied on *Nguyen* for its alleged teaching of suspension of fibrous bundles and/or proppant in a fracturing fluid on-the-fly.

Therefore, independent claim 18 is not obviated by *McDaniel* in view of *Sielcken* further in view of *Martin* further in view of *Nguyen*. Claims 19, 25, 28, 29, 31-32, 34, 65, and 66 depend, either directly or indirectly, from independent claim 18 and therefore include all of the elements of the independent claim. See 35 U.S.C. § 112 ¶ 4 (2004). Accordingly, Applicants respectfully request the withdrawal of this rejection.

E. Claims 42, 46, 73, and 76

Claims 42, 46, 73, and 76 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Beck* in view of *Sielcken*, further in view of *McDaniel* “for the same reasons of record as set forth in paragraph 5 of [the Previous Office Action].” (Office Action at 6.) With respect to this rejection, the Previous Office Action states:

Beck et al further teach that a ...resin composition could comprise a liquid resole phenol/formaldehyde resin (See column 4, lines 1-3). Beck et al fail to teach that the binder could be glycidyl ether or epoxies such as bisphenol A-epichlorohydrin resin ... or a polyester or a natural resin.”

...

McDaniel et al teach that a liquid resole phenol/formaldehyde resin (See P53, 70, 98) or a glycidyl ether or epoxies such as bisphenol A-epichlorohydrin resin (See P187) or a polyester resin (See P70) or a natural resin (See P75) can be used for binding particles together.

(Previous Office Action at 5-6). Applicants respectfully disagree and submit that the combination of *Beck*, *Sielcken*, and *McDaniel* does not obviate independent claims 35 and 68 because the combination of references does not teach or suggest each and every element of the claims, and those elements which are not taught or suggested by the combination of references are not obviated in any manner by *Beck*, *Sielcken* and *McDaniel*. MPEP § 2142.

In particular, as discussed above in Section V(C), *Beck* fails to teach “adhering the density reducing material to a surface of the coated particulate on-the-fly to create at least one reduced-density, coated particulate,” as recited in independent claims 35 and 68, and also teaches away from such an on-the-fly process. As also discussed in Section V(C), *Sielcken* fails

to teach or render obvious the missing elements. Similarly, as discussed in Section V(A), *McDaniel* fails to teach or render obvious these missing elements.

Therefore, independent claims 35 and 68 are not obviated by *Beck* in view of *Sielcken* further in view of *McDaniel*. Claims 42, 46, 73, and 76 depend, either directly or indirectly, from independent claims 35 or 68 and therefore include all of the elements of the independent claim from which they each depend. See 35 U.S.C. § 112 ¶ 4 (2004). Accordingly, Applicants respectfully request the withdrawal of this rejection.

F. Claims 26, 43, and 74

Claims 26, 43, and 74 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *McDaniel* in view of *Sielcken* in view of *Martin/McDaniel* in view of *Sielcken* in view of *Martin* in view of *Nguyen/McDaniel* in view of *Sielcken/Beck* in view of *Sielcken/Beck* in view of *Sielcken* in view of *McDaniel* further in view of U.S. Patent 4,665,988 issued to Murphey *et al.* (hereinafter "*Murphey*") "for the reasons of record set forth in paragraph 8 of [the Previous Office Action]." (Office Action at 7.) With respect to this rejection, the Previous Office Action states:

The cited prior art fails to teach claimed solvent.

...

Murphey *et al* teach ... the use of ethylene glycol butyl ether (See column 5, line 54) as a solvent for dissolving epoxy resins (See column 5, lines 47-48) such as bisphenol A-epichlorohydrin (See column 5, line 60).

(Office Action at 8.) Applicants respectfully disagree and submit that any of these combinations of references does not obviate independent claims 18, 35 and 68 because the combination of references does not teach or suggest each and every element of the claims, and those elements which are not taught or suggested by the combination of references are not obviated in any manner by any of the combinations. MPEP § 2142.

Each of the following combinations of references have been discussed above:

- *McDaniel* in view of *Sielcken* in view of *Martin* was discussed in Section V(B);
- *McDaniel* in view of *Sielcken* in view of *Martin* in view of *Nguyen* was discussed in Section V(D);
- *McDaniel* in view of *Sielcken* was discussed in Section V(A);

- *Beck* in view of *Sielcken* was discussed in Section V(C); and
- *Beck* in view of *Sielcken* in view of *McDaniel* was discussed in Section V(E).

All of these combinations of references fail to teach or render obvious at least “adhering the density reducing material to a surface of the coated particulate on-the-fly to create at least one reduced-density, coated particulate,” as recited in independent claims 18, 35 and 68. *Murphey* does not teach or render obvious adhering a density reducing material to a surface of a coated particulate, much less doing so on-the-fly. Rather, the Examiner has merely relied upon *Murphey* for its alleged teaching of the use of ethylene glycol butyl ether as a solvent for dissolving epoxy resins such as bisphenol A-epichlorohydrin.

Therefore, independent claims 18, 35, and 68 are not obviated by any of the combinations of references listed. Claims 26, 43, and 74 depend, either directly or indirectly, from independent claims 18, 35 or 68 and therefore include all of the elements of the independent claim from which they each depend. See 35 U.S.C. § 112 ¶ 4 (2004). Accordingly, Applicants respectfully request the withdrawal of this rejection.

VI. No Waiver

All of Applicants’ arguments are without prejudice or disclaimer. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner’s additional statements, such as, for example, any statements relating to what would be obvious to a person of ordinary skill in the art. The example distinctions discussed by Applicants are sufficient to overcome the outstanding rejections.

SUMMARY AND PETITION FOR ONE-MONTH EXTENSION OF TIME TO FILE THIS RESPONSE

In light of the above remarks, Applicants respectfully submit that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicants hereby petition for a one-month extension of time to file this response under 37 C.F.R. § 1.136(a), extending the period of time to file this response from January 1, 2008, to February 1, 2008. The Commissioner is hereby authorized to debit the Deposit Account

of Baker Botts L.L.P., Deposit Account No. 02-0383, Order Number 063718.0178 in the amount of \$120.00 under 37 C.F.R. § 1.17 (a)(1) for the one-month extension of time. Should the Commissioner deem that any additional fees are due, including any additional fees for extensions of time, the Commissioner is authorized to debit Baker Botts L.L.P. Deposit Account No. 02-0383, Order Number 063718.0178, for any underpayment of fees that may be due in association with this filing.

Respectfully submitted,



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Date: February 1, 2008